

Preliminary Construction and Demolition Management Plan

Dublin Whitewater Course
Georges Dock, Dublin

for

Urban Agency Architect

N17397

January 2019

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Disclaimer

It should be noted that this document is preliminary and is to be used only for planning purposes. It is not a substitute for a detailed Construction Management Plan as would typically be completed by the Main Contractor. This document is for the internal use of the project design team and for Part 8 planning purposes only, it is not to be used by or sent to any parties external to the appointed design team or Dublin City Councils planning team without the written permission of Patrick Parsons. This document is not to be used under any circumstances for tendering or costing purposes. All information is to be read in conjunction with Patrick Parsons engineering drawings.

1.0 Introduction

1.1.1 Terms of reference

The CMP describes the proposed programme of the construction works and the key activities that will be undertaken. The project comprises of two separate entities, construction of a Whitewater Course within the existing Georges Dock and construction of two Quayside Buildings in the place of the former DDDA building. It then identifies, in general terms, potential significant environmental effects associated with the activities and outlines the proposals for the construction phase control of them. Detailed consideration of effects during construction and proposed control measures are provided in each associated report submitted with the planning application. The CMP forms part of the overall Project Management and as such, activities described would be integrated with other Quality, Sustainability and Health and Safety management processes.

1.1.2 Programme of works

The construction programme for the Whitewater Course and two Quayside Buildings will span approximately 18 months.

1.1.3 Description of works

The construction activities associated with the Whitewater Course comprises briefly of piling or raft (enabling works), construction of reinforced concrete structures within Georges Dock and mechanical and electrical fit out including a canoe conveyor, 4 axial pumps, water treatment and lighting.

The construction activities associated with the Quayside Buildings building briefly comprises asbestos removal and demolition of the former DDDA building, piling and or raft (enabling works), erection of frame, cladding, roofing and glazing and mechanical and electrical fit out.

2.0 Material and resource use

2.1 Plant and Equipment

Consideration has been given to the types of plant that are likely to be used during the construction works. The plant and equipment associated with each key element and of the construction process is set out below;

	Stage	
	Enabling works	Construction
Tracked/wheeled 360-degree excavator	*	*
Dumpers		*
Mobile crane		*
Mobile pile rig	*	
Air compressors		*
Power tools including percussion drills and cutting discs		*
Hand / power tools	*	*
Wheel washing plant	*	*
Scaffold		*
Mobile access platform		*
Delivery trucks	*	*
Skips and skip trucks		*
Concrete pumping apparatus	*	*
Forklift trucks		*

2.2 Hours of working

It is anticipated that the normal hours of working for construction will be:

- Weekdays 07.30 to 18.00 hours, and 08.00 to 13.00 hours on Saturdays.

These working arrangements will be agreed with Dublin City Council prior to commencement. Hours of working will be governed by planning condition, including arrangements for carrying out specific tasks outside the agreed hours. Night time working will be restricted to exceptional circumstances. Hours of working will be covered in the Code of Construction Practice.

3.0 Environmental effects

A review has been undertaken of the potential environmental issues and adverse effects associated with the demolition and construction works. This has been undertaken using the experience of the project team in association with a review of the proposed development.

Environmental effects can arise either from day to day construction operations, or from individual instances of mishap or accident.

Issue	Anticipated site activities	Potential effects	Receptor	Period of effects
Noise	Construction traffic, piling	Vehicle movement and activity within site, regrading of soil and excavation, general building and construction activity	Nearby residential and business properties	Short term
Dust/ Air quality	Construction traffic and operations, excavations, materials handling and storage, regarding and earth moving, concrete batching.	Windblown dust affecting adjacent properties. Effects on air quality from airborne material	Nearby residential and business properties	Short term
Traffic	Deliveries to and from site	Noise and general disturbance	Nearby residential and business properties	Short term
Access to adjacent business and properties	Material storage	Hazards from construction traffic and building operations	Adjacent roads	Short term
Hazardous materials	Storage of hazardous materials on site	Spill and general contamination hazards	Watercourses/ site workers	Short term

Water/Groundwater	Excavation and construction activities, vehicle movements, human activity generally	Pollution to adjacent watercourse and groundwater	Watercourses & groundwater	Short term
Asbestos	Carryout asbestos removal using approved contractors from the existing DDDA building prior to demolition	Release of asbestos fibres into atmosphere and exposure of construction workers	Public at nearby properties and construction staff	Short and Longterm

4.0 Construction phase control measures

4.1 Procedures and code of practice

The following measures will be pursued to eliminate, reduce or offset the potential adverse environmental effects identified in the table above. Any detrimental or potential adverse effects will be appropriately mitigated through a variety of procedures and actions that are set out in this report and in the identified control measures for construction phase activities set out in individual reports carried out for the benefit of this site.

- Preparation of procedures which will clearly set out the methods of managing environmental issues for all involved with the construction works, including supply chain management
- Requirement to comply with these procedures included as part of the contract conditions for each element of the work. All contractors tendering for work will be required to demonstrate that their proposals can comply with the procedures, and current best practice techniques
- Establishing a dedicated point of contact and responsibility to deal with issues if they arise. The point of contact will be a named representative from the construction manager or contractor, part of the professional team (the Construction Liaison Officer, see below)
- Production of a regular newsletter to be circulated to neighbouring occupiers, residents and the relevant authorities
- Regular dialogue with Dublin City Council and the local community

The procedures will be set out in the Code of Construction Practice and circulated to Dublin City Council and other relevant bodies, prior to commencement of the works. It will include the following:

- The broad plan of the phasing of the works and its context within the whole project
- Baseline levels for noise and dust and details of any monitoring protocols that may be necessary during the works
- Housekeeping procedures and environmental control measures; Any requirement for monitoring and record keeping;
- Contact details during normal working hours and emergency details outside working hours
- Provision for reporting, public liaison, and prior notification
- The mechanism for residents and other members of the public to register complaints and the procedures for responding to complaints
- Prohibited or restricted operations (location or hours.)
- Details of construction operations highlighting any operations likely to result in disturbance and/or working hours outside the core working period, with an indication of the expected duration of key phases and dates

The details of proposed routes for heavy goods vehicles travelling to and from the application site, and details of all works involving interference (where necessary) with a public highway, including temporary carriageway/footpath closures, realignment and diversions.

4.2 Management of subcontractors

Individual contracts (for example for groundworks and site preparation) will incorporate relevant requirements in respect of environmental control, based largely on the standard of 'good working practice' as well as Statutory Requirements. Potential sub-contractors will be required to demonstrate how they will achieve best practice, how targets will be met and how potential effects will be minimised.

The following will be put in place to assist the management of sub-contractors:

- Health and Safety Management Plan (HASMP), setting out the construction methodology and relevant legislation, guidelines and best practice;
- Code of Construction Practice (CCP), which is intended to establish a framework for the environmental aspects of the HASMP. This document will apply to all construction work, building site activities, cleaning and maintenance, transportation of materials and spoil, landscaping activities, and includes both preventative and construction phase control measures;

4.3 Management of construction works

There will be a designated liaison officer (the 'Construction Liaison Officer') who will be in regular contact with the public, will keep residents informed of progress and will deal with complaints and enquiries. This nominated individual will be named at the application site entrance, with a contact number, and will be identified to Dublin City Council and local resident/community groups, prior to the start of site activities, and whenever a change of responsibility occurs.

4.4 Response to complaints

Any complaints will be logged on site and, where necessary, reported to the relevant individual within the Local Planning Authority (and vice versa) as soon as practicable.

The procedures will specify the roles and responsibilities of the Construction Liaison Officer and the Local Planning Authority in respect of breaches and complaints from the public. The required actions will be different in each specific case, depending on the operation, equipment or location or applying additional controls (for example screening).

4.5 Prior notice of specific activities or operations

In the event of unusual or specific activities and operations that can be anticipated, (e.g. special large-scale delivery of materials outside normal working hours) such events will be notified to Dublin City Council and to the relevant property owners or occupiers wherever possible and neighbours, in advance of the activity. The relevant 'notifiable' activities will be determined by agreement with the Local Planning Authority once the detailed programme of construction is defined and will include:

- Commencement of construction in certain areas;
- Necessary night time, weekend or evening working (outside core areas) of a type which may affect properties;
- Road or footpath closures/diversions and movements of wide loads; and
- Work on roads affecting land used by others.

4.6 Traffic management

Closures and Diversions - whilst no long-term road closures are envisaged, short term closures may be required in order to deliver large items of building plant or equipment, or for works to the highway. If this is required, then consent will be obtained from Dublin City Council.

Notice regarding possible short-term closure or diversion of public rights of way within and/or adjacent to the application site shall be given by the Contractor/Construction Manager to the relevant local authorities and to the emergency services in advance of the required closure or diversion dates.

HGV access to the proposed course area will be from the southern side of the site via Custom House Quay where the main site access is to be located. There will be specific areas for construction compounds, designated offloading points, access gates, and security barriers. It should be noted that the contractor will need to maintain access to adjacent properties throughout the works. The compound location and preliminary access arrangement is included in **Appendix A**. The area designated as the 'Canoe Polo' is a flat slab with a large associated area so may be used as material storage and a temporary compound when required.

All construction traffic entering and leaving the application site will be closely controlled. Vehicles making deliveries to the application site or removing spoil or other material, will travel via designated routes. All HGV movements to and from the site are proposed to be routed along Custom House Quay. Signs will be placed at the site, and on surrounding roads, to inform drivers that other routes are not available to construction traffic. The proposed designated route will be subject to the agreement of the Dublin City Council. Construction access routes will avoid using any roads that may compromise use of the LUAS Tram.

Deliveries should be phased and controlled on a 'just in time' basis, all being clearly marked to show their destination. This will minimise travel time around the application site and any associated noise. All transportation to and from the application site will be on rubber tyre vehicles. Tracked vehicles will only operate within the site. The timing of deliveries will seek to avoid the periods of peak traffic flows on the local road network.

It is anticipated that a workforce of approximately 100-120 people will be employed, working for the main contractor, sub-contractors, suppliers and other organisations. Cars and other vehicles used by workers may have some limited parking available within the site, however private transport use is to be kept to a minimum and the use of public transport to site encouraged. Restrictions on parking on neighbouring roads will be strictly enforced.

4.7 Monitoring and environmental management of works

The following summarises the construction phase control measures to be adopted in relation to noise, vibration and air quality issues:

- Contractors must carry out their duties in accordance with the "Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition" document provided by Dublin City Council. (This document is appended to the Noise Statement that is issued as part of this application).

- Designated and supervised areas and compounds for storage of materials, storage of plant and equipment, site huts and parking of vehicles, storage of building materials, and locations for loading and unloading of vehicles.
- Agreed construction methodology to minimise generation of noise, vibration and dust;
- Use of hoardings, where appropriate, to assist acoustic screening;
- Requirement for engines to be switched off on-site when not in use, use of quieter plant, noise suppression equipment, regular plant maintenance, screening of plant (if appropriate);
- Spraying of spoil heaps, excavated material and other areas with water when conditions dictate;
- Effective wheel/body washing facilities to be provided and used as necessary;
- A road sweeper will be used as and when the need for road cleaning arises;
- Vehicles carrying waste material off-site to be sheeted;
- Vibration monitoring will be required for all piling operation;

4.8 Waste management, recycling and disposal

Waste will be generated during all stages of the construction works. Major sources of waste within the construction process are:

- Removal of existing fill material from Georges Dock
- Demolition of existing DDDA building
- Packaging – plastics, pallets, packaging
- Materials generated from site wastage – temporary works, shuttering

All relevant contractors will be required to investigate opportunities to minimise waste arisings at source and, where such waste generation is unavoidable, to maximise the recycling and reuse potential of construction materials. Wherever feasible, such arisings will be dealt with in a manner that reduces environmental impact and maximises potential re-use of materials. Recycling of materials will largely take place off-site where noise and dust are less likely to influence the surrounding area to the application site.

Georges Dock is currently filled with what is believed to be demolition rubble, stone and silt this will need to be excavated to formation level and removed from site. Opportunities to either encapsulate or reuse should be investigated however due to limited material storage available this would seem unfeasible. The classification has not yet been proved by material testing. The formation level is -1.30m and whilst the top level of the demolition rubble varies it is generally circa 1m. This would mean removal of approximately 18285m³ of material.

The destination of all waste or other materials removed from site will be notified by the Contractor/Construction Manager for approval (via consultation with the Authorities). Loads will only be deposited at authorised waste treatment and disposal sites. Deposition will be in accordance with the requirements of the Environment Protection Agency, the Waste Management Acts 1996-2003, Waste Management (Licensing) Regulations 2004, Waste Management (Registration of Broker and Dealers) Regulations 2008, Waste Management (Collection Permit) Regulations 2007-2008 and Waste Management (Hazardous Waste) Regulations 1998-2000.

To prove the correct depositing of excavated material and to prevent the occurrence of fly-tipping, a docket system will be used. The Contractor/Sub-contractor will operate a

sequentially numbered docket system, to confirm that each load is received at the approved disposal site. Copies of the dockets are to be provided to the nominated manager, and available for inspection at the application site. In addition, direct routes via main roads to designated tips will be agreed with the sub-contractors. No burning of construction waste will be undertaken on the application site.

It should be noted that during construction no discharge from the construction areas is permitted to the Liffey or the existing surface water drainage system (which discharges to the Liffey). If any dewatering of excavations is required water will be required to discharge to the combined or foul water sewer - the contractor is to be responsible for providing appropriate silt control measures to the satisfaction of Irish Water. The contractor is to make all necessary arrangement with Irish Water for temporary connections. All works must comply with the Greater Dublin Regional Code of Practice for Drainage Works.

- 4.9 The construction of the dismount stairs at the start of the Whitewater facility will require dewatering of the local section to allow installation of what will be a precast form of construction.

4.10 Temporary Protection

George's Dock is a Protected Structure including the dock walls. All appropriate measures must be taken in order to protect historic fabric, protected structures and trees from damage during the construction phase of the project.

Removal of any fill material from the base of the dock must be carefully undertaken to minimise damage to the dock walls. Removal of material directly adjacent to the existing granite walls should be undertaken by hand. Nothing is to be fixed to or placed against the dock walls during construction. No items which are heavy or may cause damage to the stonework can be placed upon the granite capstones surrounding the dock throughout construction. The capping stones should be protected and covered by structural plywood for the duration of the works.

Protection needs to be provided for the Triumphal Arch during construction. The structure must be fully hoarded to its full height using a plywood clad timber frame which includes an access doorway. A low level protective barrier may be needed to avoid potential damage by vehicles as well as a Heras perimeter fence.

The winch closest to the Triumphal Arch is to be hoarded and retained in position on site during the works. The Conservation Architect will prepare a photographic record of the winch prior to its enclosure. Following an assessment of the detailed construction plan provided by the Appointed Contractor for the works, the risks to the winch will be reviewed. If deemed necessary by the Conservation Architect, the winch will be temporarily removed and stored securely on site in a suitable container, being reinstated upon completion of the works. The winch on the west side of the lock and the crane on the east dock wall are to be protected through the works with hoarding to the dock side.

The River Liffey quay wall is also to be protected throughout the works similarly to the dock wall using plywood protection over the capping stones. Following the demolition of the DDDA building, the existing buttresses of the river wall will be carefully exposed (by hand) to ensure that the proposed piled foundations and loadings will avoid the buttresses.

5.0 Demolition phase control measures

The demolition phase of a project should also be planned and managed to ensure this can be done safely and with limited impact on the environment.

5.1 Procedures and code of practice

The environmental effects identified in the table in Section 3.0 of this report will also apply to the demolition phase of the project. The following measures will be pursued to eliminate, reduce or offset the potential adverse environmental effects identified in Section 3.0. Any detrimental or potential adverse effects will be appropriately mitigated through a variety of procedures and actions that are set out in this report and in the identified control measures for demolition phase activities set out in individual reports carried out for the benefit of this site.

- Preparation of procedures which will clearly set out the methods of managing environmental issues for all involved with the demolition works, including supply chain management
- Requirement to comply with these procedures included as part of the contract conditions for each element of the work. All contractors tendering for work will be required to demonstrate that their proposals can comply with the procedures, and current best practice techniques
- Establishing a dedicated point of contact and responsibility to deal with issues if they arise. The point of contact will be a named representative from the demolition manager or contractor, part of the professional team (the Construction Liaison Officer, see below)
- Production of a regular newsletter to be circulated to neighbouring occupiers, residents and the relevant authorities
- Regular dialogue with Dublin City Council and the local community

The procedures will be set out in the Code of Construction Practice and circulated to Dublin City Council and other relevant bodies, prior to commencement of the works. It will include the following:

- The broad plan of the phasing of the demolition works and its context within the whole project
- Baseline levels for noise and dust and details of any monitoring protocols that may be necessary during the demolition works
- Housekeeping procedures and environmental control measures; Any requirement for monitoring and record keeping;
- Contact details during normal working hours and emergency details outside working hours
- Provision for reporting, public liaison, and prior notification
- The mechanism for residents and other members of the public to register complaints and the procedures for responding to complaints
- Prohibited or restricted operations (location or hours.)
- Details of demolition operations highlighting any operations likely to result in disturbance and/or working hours outside the core working period, with an indication of the expected duration of key phases and dates

The details of proposed routes for heavy goods vehicles travelling to and from the application site, and details of all works involving interference (where necessary) with a public highway, including temporary carriageway/footpath closures, realignment and diversions.

5.2 Management of subcontractors

Individual contracts will incorporate relevant requirements in respect of environmental control, based largely on the standard of 'good working practice' as well as Statutory Requirements. Potential sub-contractors will be required to demonstrate how they will achieve best practice, how targets will be met and how potential effects will be minimised.

The following will be put in place to assist the management of sub-contractors:

- Health and Safety Management Plan (HASMP), setting out the demolition methodology and relevant legislation, guidelines and best practice;
- Code of Construction Practice (CCP), which is intended to establish a framework for the environmental aspects of the HASMP. This document will apply to all demolition work.

5.3 Asbestos Removal

Dublin City Council commissioned an asbestos survey and report for the former DDDA building which was undertaken in March 2019. Asbestos was found to be present in the form of bitumen adhesive on the floor beneath the screed in a vacant office. As the building is still extensively used, intrusive access was limited and therefore asbestos may be present in other parts of the building. As recommended in the report, a full survey should take place after the building has been vacated. The full survey should be used to plan and manage asbestos removal which will need to be completed prior to demolition and in accordance with Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006.

5.4 Management of demolition works

There will be a designated liaison officer (the 'Construction Liaison Officer') who will be in regular contact with the public, will keep residents informed of progress and will deal with complaints and enquiries. This nominated individual will be named at the application site entrance, with a contact number, and will be identified to Dublin City Council and local resident/community groups, prior to the start of site activities, and whenever a change of responsibility occurs.

5.5 Response to complaints

Any complaints will be logged on site and, where necessary, reported to the relevant individual within the Local Planning Authority (and vice versa) as soon as practicable.

The procedures will specify the roles and responsibilities of the Construction Liaison Officer and the Local Planning Authority in respect of breaches and complaints from the public. The required actions will be different in each specific case, depending on the operation, equipment or location or applying additional controls (for example screening).

5.6 Prior notice of specific activities or operations

In the event of unusual or specific activities and operations that can be anticipated, (e.g. special large-scale removal of materials outside normal working hours) such events will be notified to Dublin City Council and to the relevant property owners or occupiers wherever possible and neighbours, in advance of the activity. The relevant 'notifiable' activities will be determined by agreement with the Local Planning Authority once the detailed programme of construction is defined and will include:

- Commencement of demolition in certain areas;
- Necessary night time, weekend or evening working (outside core areas) of a type which may affect properties;
- Road or footpath closures/diversions and movements of wide loads; and
- Work on roads affecting land used by others.

5.7 Traffic management

Closures and Diversions - whilst no long-term road closures are envisaged, short term closures may be required in order to remove large items of building plant or materials. If this is required, then consent will be obtained from Dublin City Council.

Notice regarding possible short-term closure or diversion of public rights of way within and/or adjacent to the application site shall be given by the Contractor/demolition Manager to the relevant local authorities and to the emergency services in advance of the required closure or diversion dates.

HGV access will be from the southern side of the site via Custom House Quay where the main site access would be located. There will be specific areas for site compounds, designated loading points, access gates, and security barriers.

All demolition traffic entering and leaving the application site will be closely controlled. Vehicles removing spoil or other material, will travel via designated routes. All HGV movements to and from the site are proposed to be routed along Custom House Quay. Signs will be placed at the site, and on surrounding roads, to inform drivers that other routes are not available to demolition traffic. The proposed designated route will be subject to the agreement of the Dublin City Council. Demolition access routes will avoid using any roads that may compromise use of the LUAS Tram.

Deliveries should be phased and controlled on a 'just in time' basis, all being clearly marked to show their destination. This will minimise travel time around the application site and any associated noise. All transportation to and from the application site will be on rubber tyre vehicles. Tracked vehicles will only operate within the site. The timing of deliveries will seek to avoid the periods of peak traffic flows on the local road network.

5.8 Monitoring and environmental management of works

The following summarises the demolition phase control measures to be adopted in relation to noise, vibration and air quality issues:

- Contractors must carry out their duties in accordance with the "Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and

Demolition” document provided by Dublin City Council. (This document is appended to the Noise Statement that is issued as part of this application).

- Designated and supervised areas and compounds for storage of materials, storage of plant and equipment, site huts and parking of vehicles, storage of building materials, and locations for loading and unloading of vehicles.
- Agreed demolition methodology to minimise generation of noise, vibration and dust;
- Use of hoardings, where appropriate, to assist acoustic screening;
- Requirement for engines to be switched off on-site when not in use, use of quieter plant, noise suppression equipment, regular plant maintenance, screening of plant (if appropriate);
- Spraying of spoil heaps, excavated material and other areas with water when conditions dictate;
- Effective wheel/body washing facilities to be provided and used as necessary;
- A road sweeper will be used as and when the need for road cleaning arises;
- Vehicles carrying waste material off-site to be sheeted;

5.9 Waste management, recycling and disposal

Waste will be generated during all stages of the demolition works. Major sources of waste within the demolition process are:

- Removal of Asbestos from the DDDA building
- Demolition of the DDDA building

All relevant contractors will be required to investigate opportunities to minimise waste arisings at source and, where such waste generation is unavoidable, to maximise the recycling and reuse potential of construction materials. Wherever feasible, such arisings will be dealt with in a manner that reduces environmental impact and maximises potential re-use of materials. Recycling of materials will largely take place off-site where noise and dust are less likely to influence the surrounding area to the application site.

The destination of all waste or other materials removed from site will be notified by the Contractor/Demolition Manager for approval (via consultation with the Authorities). Loads will only be deposited at authorised waste treatment and disposal sites. Deposition will be in accordance with the requirements of the Environment Protection Agency, the Waste Management Acts 1996-2003, Waste Management (Licensing) Regulations 2004, Waste Management (Registration of Broker and Dealers) Regulations 2008, Waste Management (Collection Permit) Regulations 2007-2008 and Waste Management (Hazardous Waste) Regulations 1998-2000.

To prove the correct depositing of excavated material and to prevent the occurrence of fly-tipping, a docket system will be used. The Contractor/Sub-contractor will operate a sequentially numbered docket system, to confirm that each load is received at the approved disposal site. Copies of the dockets are to be provided to the nominated manager, and available for inspection at the application site. In addition, direct routes via main roads to designated tips will be agreed with the sub-contractors. No burning of construction waste will be undertaken on the application site.

It should be noted that during demolition no discharge from the demolition areas is permitted to the Liffey or the existing surface water drainage system (which discharges to the Liffey). If

any dewatering of excavations is required water will be required to discharge to the combined or foul water sewer - the contractor is to be responsible for providing appropriate silt control measures to the satisfaction of Irish Water. The contractor is to make all necessary arrangement with Irish Water for temporary connections. All works must comply with the Greater Dublin Regional Code of Practice for Drainage Works.

Demolition must be carried out without damage to protected structures including the original dock walls, lock gate, quay wall and triumphed arch. The lock gates are to be carefully removed and stored off site for use elsewhere by Dublin City Council.

Careful attention should be made to the proposed construction details which include a layer of protection between the reinforced concrete walls of the course and the existing dock walls. This detail is to allow the removal of the proposed concrete sides if the watercourse ever needs to be removed without impacting on the dock walls behind.

6.0 Summary

The construction programme will span approximately 18 months, and it is envisaged that the development will be completed in two main phases; enabling works and construction.

The initial phase of the development will be involving excavation works, demolition and slab construction.

Plant and equipment to be used during construction has been identified.

Potential effects arising from construction and demolition activities have been identified and control measures are identified in this CMP report and in other relevant reports submitted to support the planning application. A Code of Construction Practice will be written by the main contractor upon appointment and submitted to Dublin City Council and other relevant organisations to set out the agreed procedures and 'best practice' on construction operations, and in accordance with relevant legislative requirements. Likely significant adverse effects will be appropriately mitigated.

Management of subcontractors will be through procurement procedures and an agreed commitment to the Code of Construction Practice. A designated liaison officer will be in regular contact with the public, will keep residents informed of all relevant matters, and will deal with complaints and inquiries. Monitoring of construction activities will be reported back to the local authority on a regular basis.

The comments stated above are based on information received from other consultees, and this report is based upon the recommendations stated within these reports. This report is intended for the use of the project design team in support of the planning application for the site only.

Appendix A

Site Compound Plan

UK locations:

Newcastle upon Tyne

London

Manchester

Glasgow

Huddersfield

Chester

Birmingham

Guildford

International locations:

Dubai

Sydney



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